

PAT-NO: JP02002333522A

DOCUMENT-IDENTIFIER: JP 2002333522 A

TITLE: POLARIZING FILM, POLARIZING PLATE AND  
LIQUID CRYSTAL  
DISPLAY DEVICE USING THEM

PUBN-DATE: November 22, 2002

INVENTOR-INFORMATION:

NAME	COUNTRY
SUGINO, YOICHIRO	N/A
SAIKI, YUJI	N/A
MIHARA, HISAFUMI	N/A
KITAGAWA, ATSUSHI	N/A
HAMAMOTO, EIJI	N/A
KUSUMOTO, SEIICHI	N/A

ASSIGNEE-INFORMATION:

NAME	COUNTRY
NITTO DENKO CORP	N/A

APPL-NO: JP2001136568

APPL-DATE: May 7, 2001

INT-CL (IPC): G02B005/30, G02F001/1335 , G02F001/13363

ABSTRACT:

PROBLEM TO BE SOLVED: To provide a polarizing film and a polarizing plate with little variation of chromaticity even when an angle of incidence is varied and a liquid crystal display device using them.

SOLUTION: The polarizing film is an iodine type polarizing film with  $<20 \mu\text{m}$  thickness and  $\leq 0.06$  birefringence ( $\Delta n$ ) at 900 nm wavelength obtained by stretching a polyvinyl alcohol type film. When two sheets of the polarizing films are superimposed in crossed Nicols, the polarizing films exhibit  $<0.09$  chromaticity variation  $\Delta xy$  in the case chromaticity of transmitted light of incident light from the normal direction and chromaticity of transmitted light of incident light from a direction forming an angle of  $40^\circ$  to  $45^\circ$  direction with respect to the direction of the axis of polarization are represented by  $x_0, y_0$  and  $x_{40}, y_{40}$  respectively.

COPYRIGHT: (C)2003,JPO